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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,840

03/10/2004

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SNY-T5715.02

6433

24337 7590 03/30/2009
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EXAMINER

STANLEY, MARK P

ART UNIT

PAPER NUMBER

2427

MAIL DATE

DELIVERY MODE

03/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/22/2008 have been fully considered but they are not persuasive.

Applicant argues that the combination of Giglio and Mouko fails to disclose the claimed elements that pertain to usage of DHCP option 43. That is the Applicant argues the failure of Giglio and Mouko to disclose the use of option 43 for defining a scope of a subscriber site. However the Examiner respectfully disagrees, paragraph 43 of Giglio states "vendor specific information within the DHCP protocol is utilized to control allocation of IP addresses. The DHCP servers are configured to provide certain IP addresses from the IP address pool upon receipt of a request with vendor specific information". Thus, Giglio discloses the use of option 43 pertaining to vendor specific information for the purpose of assigning IP addresses from an IP address pool, where the address pool is the scope.

As previously acknowledged by the Examiner, Giglio does not explicitly state identifying the terminal via an address being a concatenation of the 'terminal identifier' and the 'host name' or the 'host name' being selected to include a 'number for the terminal wherein the number falls within the scope'. However, Mouko teaches the selection of the 'host name' including a number based on an available scope (col. 5 line 59 - col. 6 line 3, Fig. 8) and Larson teaches concatenating the host name from DHCP option 12, and the domain name from DHCP option 15, where the concatenation of the domain name with host name better identifies the terminal; hence the domain name

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acts essentially as a terminal identifier upon concatenation (pages 15-16, 'DHCP Server Behavior'). Thus, the combination of Giglio, Mouko, and Larson teach given claim limitations pertaining the usage of given DHCP options.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-19, 21-26, 28-32, and 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giglio et al. (US 2004/0039821 hereinafter Giglio) in view of Arnold et al. (US 2005/0108769 hereinafter Arnold) and further in view of Larson et al. ('DNS on Windows 2000' hereinafter Larson) and Mouko et al. (US 6,678,732 hereinafter Mouko).

Regarding claim 1, Giglio discloses "a method of configuring a home entertainment network terminal at a subscriber site, comprising:" (abstract)

"provisioning the home entertainment network terminal by using DHCP services to obtain a unique terminal identifier, wherein the DHCP services use DHCP option 43 to define a scope of the subscriber site in which the scope is defined to be equal to a maximum number of potential peer terminals at the subscriber site, wherein the DHCP

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services use DHCP option 15 to define a unique sub-domain name for the subscriber site, and wherein the DHCP services use DHCP option 12 to define a common host name" ([0008], [0024], [0027], option 43 is 'vendor specific information', scope is IP address pool, refer to RFC 2131 for use with options 12 and 15, both well known to those in the art for use during a DHCP process).

But, while Giglio teaches the use of assigning an IP address via DHCP to uniquely identify a terminal ([0005]) and acknowledging that IP addresses are not an optimum sole source for locating a specific device on a network when a terminal is constantly leaving and re-entering the network via DHCP ([0011]), Giglio does not explicitly state identifying the terminal via an address being a concatenation of the 'terminal identifier' and the 'host name' or the 'host name' being selected to include a 'number for the terminal wherein the number falls within the scope'.

However, Mouko teaches the selection of the 'host name' including a number based on an available scope (col. 5 line 59 - col. 6 line 3, Fig. 8) and Larson teaches concatenating the host name from DHCP option 12, and the domain name from DHCP option 15, where the concatenation of the domain name with host name better identifies the terminal; hence the domain name acts essentially as a terminal identifier upon concatenation (pages 15-16, 'DHCP Server Behavior').

Further, Giglio does not explicitly state the following:

"carrying out a discovery process by attempting to contact each terminal within the sub-domain within the scope of the subscriber site defined by the DHCP option 43, wherein the discovery process is limited by the maximum number of potential peer terminals at the subscriber site; and

for at least one terminal identified in the discovery process, synchronizing a database with a database residing at the identified terminal”

However, Arnold teaches connecting terminals to a network via a DHCP process ([0084]-[0085]) and subsequently initiating a discovery process with other terminals on the network to synchronize databases ([0113]-[0114]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Giglio for use of DHCP discovery and option 43 to define a scope with the teachings of Mouko for numerical numbering included in assigned DHCP hostnames based on an available scope with the teachings of Larson for concatenating a DHCP hostname of a terminal a terminal identifier and further with the teachings of Arnold for synchronizing databases of a newly connected terminal via DHCP to an older connected terminal on the network. One would have been motivated to do so for the purpose of better identifying of a terminal via inclusion of numerical numbering in a hostname and concatenation of a hostname with an identifier where Giglio acknowledges IP addresses are not an optimum sole source for locating a specific device on a network (see Giglio [0011]) and further to provide up-to-date information desirable on a newly connected terminal available on an older connected terminal via synchronizing (see Arnold [0113]-[0114]).

Regarding claim 2, Giglio, Larson, Mouko, and Arnold disclose “the method according to claim 1, wherein the synchronizing comprises synchronizing to an identified terminal having a database carrying a most recent time stamp” (applicant's

admission of fact provides evidence that synchronizing a database to one with the most recent time stamp is known in the art)

Regarding claim 3, Giglio, Larson, Mouko, and Arnold disclose “the method according to claim 1, wherein the synchronizing comprises synchronizing to an identified terminal having either a lowest or highest ordered identifier” (see Arnold [0113]-[0114], synchronizing to a single terminal, where if only one other terminal exists then the synchronizing must be to a lowest or highest ordered identifier).

Regarding claim 4, Giglio, Larson, Mouko, and Arnold disclose “the method according to claim 1, wherein the database comprises a transactional based database” (OFFICIAL NOTICE is taken that transactional based databases are well known and would have been obvious to use for the purpose of ensuring the integrity of the data in the given database, where if a transaction occurs with no errors it is considered complete and with errors there is a failure and either retry or cancel).

Regarding claim 5, Giglio, Larson, Mouko, and Arnold disclose “the method according to claim 1, further comprising determining that a re-discovery time has arrived and repeating the carrying out the discovery process and the synchronizing” (OFFICIAL NOTICE is taken that timeout limits and limited retry attempts are well known for the

purpose of preventing an endless connection attempts and a single endless initial connection attempt).

Regarding claim 6, Giglio, Larson, Mouko, and Arnold disclose “the method according to claim 1, further comprising listing an identified terminal in a list of active terminals in the sub-domain” (see Arnold [0138]-[0140], certificate listing valid terminals in the sub-domain)

Regarding claim 7, The method according to claim 1, wherein the discovery process further comprises attempting unsuccessfully to contact a terminal, and marking the unsuccessfully contacted terminal as invalid on a list of active terminals in the sub-domain” (see Arnold [0138]-[0140], certificate listing valid terminals in the sub-domain, where OFFICIAL NOTICE is taken that marking terminals as invalid in a listing during discovery would have been well known for the purpose of tracking validity of terminals in the listings)

Regarding claim 8, the claim has been analyzed and rejected for the same reasoning as 5 and 7 above.

Regarding claim 9, Giglio discloses “a method of configuring a home entertainment network terminal at a subscriber site, comprising:” (abstract)

“provisioning the home entertainment network terminal by using DHCP services to obtain a unique terminal identifier, wherein the DHCP services use DHCP option 43 to define a scope of the subscriber site, wherein the DHCP services use DHCP option 15 to define a unique sub- domain name for the subscriber site, and wherein the DHCP services use DHCP option 12 to define a common host name for the terminal;

provisioning the home entertainment network terminal by using DHCP services to obtain a unique terminal identifier, wherein the DHCP services use DHCP option 43 to define a scope of the subscriber site in which the scope is defined to be equal to a maximum number of potential peer terminals at the subscriber site, wherein the DHCP services use DHCP option 15 to define a unique sub-domain name for the subscriber site, and wherein the DHCP services use DHCP option 12 to define a common host name” ([0008], [0024], [0027], option 43 is ‘vendor specific information’, scope is IP address pool, refer to RFC 2131 for use with options 12 and 15, both well known to those in the art for use during a DHCP process, where a timeout limit and retry limit for a DHCP process is well known to those in the art).

But, while Giglio teaches the use of assigning an IP address via DHCP to uniquely identify a terminal ([0005]) and acknowledging that IP addresses are not an optimum sole source for locating a specific device on a network when a terminal is constantly leaving and re-entering the network via DHCP ([0011]), Giglio does not explicitly state identifying the terminal via an address being a concatenation of the ‘terminal identifier’ and the ‘host name’ or the ‘host name’ being selected to include a ‘number for the terminal wherein the number falls within the scope’.

However, Mouko teaches the selection of the 'host name' including a number based on an available scope (col. 5 line 59 - col. 6 line 3, Fig. 8) and Larson teaches concatenating the host name from DHCP option 12, and the domain name from DHCP option 15, where the concatenation of the domain name with host name better identifies the terminal; hence the domain name acts essentially as a terminal identifier upon concatenation (pages 15-16, 'DHCP Server Behavior').

Further, Giglio does not explicitly state the following:

"carrying out a discovery process by attempting to contact each terminal within the sub-domain within the scope of the subscriber site defined by the DHCP option 43, wherein the discovery process is limited by the maximum number of potential peer terminals at the subscriber site;

for at least one terminal identified in the discovery process, synchronizing a transactional based database with a database residing at the identified terminal, the identified terminal having a database carrying a most recent time stamp, and wherein the identified terminal has either a lowest or highest ordered identifier; listing the identified terminal in a list of active terminals in the sub-domain;

However, Arnold teaches connecting terminals to a network via a DHCP process ([0084]-[0085]) and subsequently initiating a discovery process with other terminals on the network to synchronize databases ([0113]-[0114]), where synchronizing is to a single terminal and if only one other terminal exists then the synchronizing must be to a lowest or highest ordered identifier and a certificate used by the terminal for identifying valid terminals in the domain ([0138]-[0140]), where applicant's admission of fact provides evidence that synchronizing a database to one with the most recent time stamp is known in the art).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Giglio for use of DHCP discovery and option 43 to define a scope with the teachings of Mouko for numerical numbering included in assigned DHCP hostnames based on an available scope with the teachings of Larson for concatenating a DHCP hostname of a terminal a terminal identifier and further with the teachings of Arnold for synchronizing databases of a newly connected terminal via DHCP to an older connected terminal on the network. One would have been motivated to do so for the purpose of better identifying of a terminal via inclusion of numerical numbering in a hostname and concatenation of a hostname with an identifier where Giglio acknowledges IP addresses are not an optimum sole source for locating a specific device on a network (see Giglio [0011]) and further to provide up-to-date information desirable on a newly connected terminal available on an older connected terminal via synchronizing (see Arnold [0113]-[0114]), and further to use a re-discovery time for the purpose of addressing the constant connection and disconnection of terminals in the sub-domain when using DHCP ([0011]).

Regarding claim 10, the claim has been analyzed and rejected for the same reasoning as 5 and 7 above.

Regarding claim 11, the claim has been analyzed and rejected for the same reasoning as 1 above, where the apparatus performs the method.

Regarding claim 12, the claim has been analyzed and rejected for the same reasoning as 2 above, where the apparatus performs the method.

Regarding claim 13, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 3 above, where the apparatus performs the method.

Regarding claim 14, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 4 above, where the apparatus performs the method.

Regarding claim 15, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 5 above, where the apparatus performs the method.

Regarding claim 16, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 6 above, where the apparatus performs the method.

Regarding claim 17, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 7 above, where the apparatus performs the method.

Regarding claim 18, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 8 above, where the apparatus performs the method.

Regarding claim 19, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 1 above.

Regarding claim 21, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 2 above.

Regarding claim 22, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 3 above.

Regarding claim 23, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 5 above.

Regarding claim 24, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 7 above.

Regarding claim 25, Giglio, Larson, Mouko, and Arnold disclose “the home entertainment network terminal according to claim 19, wherein the terminal comprises a television set-top box” (see Arnold Fig. 10, items 1003-1005).

Regarding claim 26, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 1 above, where the computer readable storage medium storing instructions when executed performs the method of claim 1.

Regarding claim 28, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 2 above, where the computer readable storage medium storing instructions when executed performs the method of claim 2.

Regarding claim 29, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 3 above, where the computer readable storage medium storing instructions when executed performs the method of claim 3.

Regarding claim 30, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 5 above, where the computer readable storage medium storing instructions when executed performs the method of claim 5.

Regarding claim 31, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 7 above, where the computer readable storage medium storing instructions when executed performs the method of claim 7.

Regarding claim 32, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 1 above.

Regarding claim 34, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 2 above.

Regarding claim 35, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 3 above.

Regarding claim 36, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 5 above.

Regarding claim 37, the claimed limitations have been analyzed and rejected for the same rationale as stated in claim 7 above.

Regarding claims 38-40 Giglio, Larson, Mouko, and Arnold disclose the use of a television set-top box (see Arnold [0036], Fig. 1 item 110)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK P. STANLEY whose telephone number is

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(571)270-3757. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark P Stanley/
Examiner, Art Unit 2427

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